



SLD-67HF2

Planar Photodiode

Features

- Hermetic flat window package
- High short circuit current
- Low profile TO-5 package
- Large active area
- Multiple dark current ranges available

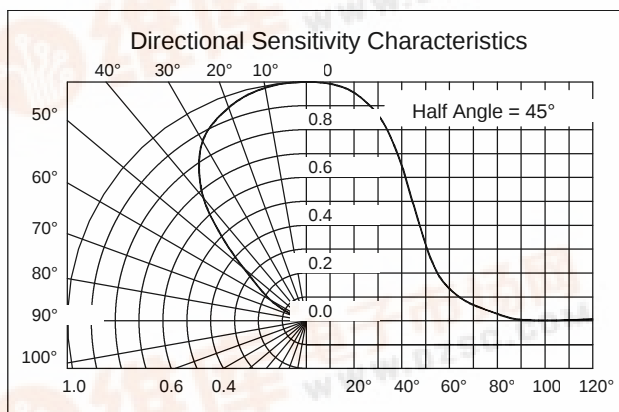
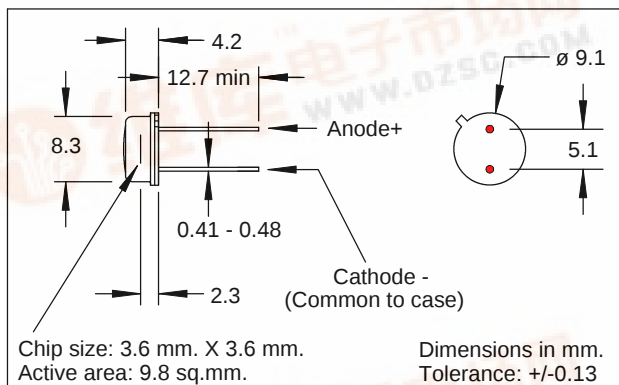
Description

This planar silicon photodetector is designed to operate in either photovoltaic or reverse bias mode to provide low capacitance with fast switching speed. It provides excellent linearity in output signal versus irradiance. Encapsulated in a flat window, dual lead TO-5 package, it is the ideal part for applications requiring a hermetic seal.

Absolute Maximum Ratings

Storage Temperature	-40 to +125°C
Operating Temperature	-40 to +125°C
Soldering Temperature (2)	260°C

Note: (1) Ee = source @ 2854 °K
 (2) >2 mm from case for <5 sec.
 (3) Ee = source @ $\lambda = 940\text{nm}$



Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Min	Typ	Max	Units	Test Conditions
I_{SC}	Short Circuit Current	450	650		μA	$V_R = 0\text{ V}$, Ee = $25\text{mW}/\text{cm}^2$ (1)
V_{OC}	Open Circuit Voltage		0.40		V	Ee = $25\text{mW}/\text{cm}^2$ (1)
I_D	Reverse Dark Current:					
	SLD-67HF2A			100	nA	$V_R = 100\text{ mV}$, Ee = 0
	SLD-67HF2B			100	nA	$V_R = 5\text{V}$, Ee = 0
	SLD-67HF2C			20	nA	$V_R = 5\text{V}$, Ee = 0
	SLD-67HF2D			5	nA	$V_R = 5\text{V}$, Ee = 0
	SLD-67HF2E			1	nA	$V_R = 5\text{V}$, Ee = 0
C_J	Junction Capacitance		180		pf	$V_R = 0$, Ee = 0, $f = 1\text{ MHz}$
t_R	Rise Time		8		μsec	$V_R=10\text{V}$, $R_L=1\text{k}\Omega$ (3)
t_F	Fall Time		10		μsec	$V_R=10\text{V}$, $R_L=1\text{k}\Omega$ (3)
V_{BR}	Reverse Breakdown Voltage	50			V	$I_R = 100\text{ }\mu\text{A}$
λ_P	Maximum Sensitivity Wavelength		930		nm	
λ_R	Sensitivity Spectral Range	400		1100	nm	
$\theta_{1/2}$	Acceptance Half Angle		45		Deg	(off center-line)

Specifications subject to change without notice

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